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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/505,165	03/22/2005	Hiroshi Danjo	257247US0PCT	6679

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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

GODENSCHWAGER, PETER F

ART UNIT	PAPER NUMBER
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1709

NOTIFICATION DATE	DELIVERY MODE
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10/05/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/505,165

Applicant(s)

DANJO ET AL.

Examiner

Peter F. Godenschwager

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1709

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 8/30/2004, 11/12/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

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DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

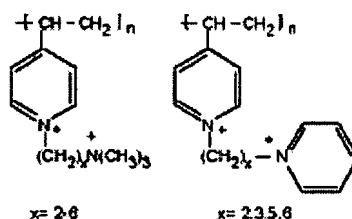
This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stephenson (EP Pub 0,306,089 A2) in view of Moody et al. (J. Radioanal. Nucl. Chem., 2001, Vol. 248, No. 2, 431-437) and in further view of Collins et al. (US Pat. No. 5,876,625).

Regarding Claims 1 and 2: Stephenson teaches a macrocyclic transition metal complex comprising a pyridinium ion and Fe(III) where the metal is coordinate by four nitrogen atoms (Pg. 3, Lns. 10-25 and 35-40).

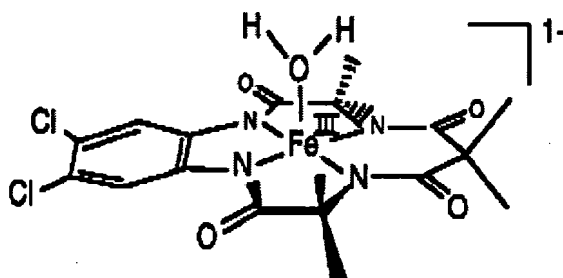
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Stephenson does not teach the pyridinium with a $-(CH_2)_nN^+(CH_3)_2(C_mH_{2m+1})$ group off the nitrogen, or a $(CH_2)_n$ -pyridinium group off the nitrogen. However, Moody et al. teach the following pyridinium compounds with the above substitutions (Fig. 1):



Stephenson and Moody et al. are combinable because they are concerned with solving a problem of the same technical difficulty, namely complexing anionic substances with cations. At the time of the invention a person of ordinary skill in the art would have found it obvious to have used the substitutions taught by Moody et al. with the metal chelate complex taught by Stephenson and would have been motivated to do so because Stephenson teaches that it is highly advantageous for the metal chelate compound to be cationic in order to achieve a high degree of catalytic activity as this produces favorable electrostatic interactions with both stains and oxidants which are normally anionic (Pg. 4, Lns. 29-31) and gives a substituted pyridinium substituent as a way to achieve this (Pg. 4, Lns. 15-20).

Stephenson does not teach a substituted pyridinium substituent on the specific metal chelate core structure of claims 1 and 2. However, Collins et al. teaches a macrocyclic, Fe(III) complex, where the R groups are all methyls and comprising an aromatic ring used as a bleach catalyst (abstract and Fig 3):



Stephenson and Collins et al. are combinable because they are concerned with the same field of endeavor, namely bleach catalysts. At the time of the invention, a person of ordinary skill in the art would have found it obvious to use the core tetraamido-N chelate structure taught by Collins et al. with the substituted pyridinium ring taught by Stephenson and would have been motivated to do so because Collins et al. teach that the tetraamido-N chelate core compounds are unusually advantageous for dye transfer inhibition, anti-soil redeposition and stain removal (2:1-5).

Regarding Claims 3 and 5: Stephenson further teaches the transition metal chelate compounds as a bleach catalyst (Pg. 2 Ln. 1).

Regarding Claims 4, 6, 7, and 8: Stephenson further teaches using the transition metal chelate compounds with a peroxyacid (an additional agent), specifically an organic peroxyacid (Pg. 4, Lns. 54-60).

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-Form 892.

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Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter F. Godenschwager whose telephone number is (571) 270-3302. The examiner can normally be reached on Monday-Friday 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571) 272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PFG
September 27, 2007



MARK EASHOO, PH.D.
SUPERVISORY PATENT EXAMINER

28/Sep/07